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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,142

05/31/2006

Luc Forget

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12/31/2009

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EXAMINER

GOFF II, JOHN L

ART UNIT

PAPER NUMBER

1791

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/596,142	<b>Applicant(s)</b> FORGET ET AL.	
	<b>Examiner</b> John L. Goff	<b>Art Unit</b> 1791	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10,12-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10,12-18 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is in response to the amendment filed on 9/8/09.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

3. Claims 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 14 recites the limitation “an additional polyolefinic layer of low density ethylene is interposed between the backing and the wear layer”. Claim 10 requires “melting the wear layer in order to ensure that it adheres with the backing” because this limitation requires melting the wear layer and adhering it with the backing the limitation appears to exclude additional layers between the melted wear layer and the backing otherwise melting the wear layer would not adhere the wear layer with the backing rather it would adhere the wear layer with the layer of low density ethylene which layer of low density ethylene must then be melted to adhere with the backing. The claims do not require melting the layer of low density ethylene rather the claims require melting the wear layer. In view of the above, claim 14 is interpreted as requiring the wear layer including the one or more intermediate layers and the additional polyolefinic layer are all melted.

***Claim Rejections - 35 USC § 103***

5. Claims 10, 13, 16-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Remmert (U.S. Patent 3,829,343) in view of Ausetute (“Polyethylene: Production and Properties & Uses” available as of 6-2002 as evidenced by the internet archive).

Remmert discloses a method and equipment for making a multilayer product comprising providing a polymeric backing and a backing feeder device (e.g. the roll the polyurethane foam backing is wound on or the roll (1)), providing a thermoplastic polymer wear layer/adhesive layer having a top surface and a bottom surface and a wear layer feeding device (e.g. the roll the polyethylene films wear layer is wound on), conveying the backing via the feeder device into a backing preheating station to preheat the backing, applying the bottom surface of the cold wear layer on the preheated backing via a device for putting the backing and the wear layer into contact (e.g. the roll (2)) to make a wear layer-backing assembly, conveying the backing and the wear layer through a heating oven via a conveyor device (e.g. the roll (3)), melting the wear layer in order to ensure that it adheres with the backing in the heating oven comprising one or more gas blowing nozzles wherein pressure is exerted on the backing and wear layer by means of the gas blowing nozzle, and cooling the obtained product in order to bring it to a temperature close to room temperature (e.g. by roll (4) or by simply removing the product from the equipment) (Column 5, lines 5-65).

Regarding the limitations of “preheating the backing at a temperature between 100 and 130°C” and “melting the wear layer in order to ensure that it adheres with the backing, at a temperature between 120 and 180°C”, Remmert is not limited to any particular heating temperatures. Further, the preheating station as taught by Remmert heats the backing to

Art Unit: 1791

temperatures in the region or above the melting temperature of the wear layer, and the heating oven as taught by Remmert heats the wear layer and backing to melt the wear layer (Column 4, lines 43-48 and Column 5, lines 33-36). It is readily understood in the art that the melting point of polyethylene, i.e. the wear layer, is between about 115 to about 135 °C depending upon the use of low density or high density polyethylene as evidenced by Ausetute, it being noted Remmert is not limited to any particular polyethylene. It would have been obvious to one of ordinary skill in the art at the time the invention was made to preheat the backing at temperatures within the melting temperature region as taught by Remmert wherein conventional polyethylene melting temperatures are known to be within the range of 115 °C to 135 °C as evidenced by Ausetute and to heat the wear layer to above the melting point to melt the layer as taught by Remmert wherein conventional polyethylene is known to melt at temperatures above 115 °C to 135 °C as evidenced by Ausetute only the expected results being achieved.

Regarding claim 16, a polyurethane surface layer is applied to the top surface of the wear layer (Column 5, lines 60-65).

Regarding claims 17 and 18, the second heater taught by Remmert comprises one or more gas blowing nozzles, and the roll 3 conveys the backing and wear layer under the nozzles. The nozzles and roll are intrinsically in a chamber, e.g. a room of some type or even the atmosphere, heated by the nozzles which chamber meets the usual definition of an oven whereby the roll 3 conveys the backing and wear layer through the oven.

Regarding claim 18, the limitation “the backing being conveyed via the feeder device into the preheating station in which it is preheated to a temperature between 100°C and 130°C, and then the preheated backing being put into contact with the wear layer in the contacting device,

Art Unit: 1791

the backing having been conveyed by the backing feeding device, the backing and the wear layer being then conveyed through the heating oven, inside which the wear layer-backing assembly is heated to a temperature between 120°C and 180°C and conveyed through the oven on the conveyor device, pressure being exerted during this conveyance on the wear layer-backing assembly by means of the gas blowing nozzle in order to melt together the wear layer and the backing.”, is directed to either the material worked upon, i.e. a backing or wear layer, or functional language, i.e. melting together the backing and the wear layer. Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim (MPEP 2115). The equipment taught by Remmert is capable of working upon the materials claimed, i.e. a backing and a wear layer. Further, a claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim (MPEP 2114). The equipment taught by Remmert includes all the structural limitations of the claim to form a device capable of performing the functional language, i.e. melting together the backing and the wear layer.

Regarding claim 13, because the one or more intermediate layers of claim 10 are optional and claim 13 does not require the wear layer to include one or more intermediate layers claim 13 does not further limit the claim.

***Claim Rejections - 35 USC § 102***

6. Claims 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Remmert.

Remmert is fully described above. Regarding claim 18, Remmert teaches all of the structural limitations in the claims of describing doubling equipment comprising a feeder device capable of feeding a backing, a preheating station capable of preheating a backing, a feeding device capable of feeding a wear layer, a device capable of putting a backing and a wear layer into contact, a heating oven comprising one or more gas blowing nozzles, and a conveyor device capable of conveying a backing and a wear layer through a heating oven. The other limitations are directed to either the material worked upon or functional language such that Remmert anticipates the claim. Regarding claim 20, claim 20 is a product by process claim. Remmert teaches all of the structure required by the claim of a product including a polymeric backing bonded to a thermoplastic wear layer. Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product (See MPEP 2113).

***Claim Rejections - 35 USC § 103***

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Remmert and Ausetute as applied above in paragraph 5, and further, in view of Hashimoto et al. (JP 5725315 and see also the abstract).

Art Unit: 1791

Remmert as modified is silent as to the backing comprising an olefinic polymer, it being noted Remmert teaches the backing comprises polyurethane foam and the product is permeable. It was known in the art that the permeability of polyurethane foam is improved by including an olefinic polymer such as polyethylene as shown by Hashimoto (See abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the backing of polyurethane foam taught by Remmert as modified an olefinic polymer as shown by Hashimoto to improve the permeability of the product.

8. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Remmert and Ausetute as applied in paragraph 5 above, and further in view of Delisio et al. (WO 01/03921).

Remmert as modified above teaches all of the limitations in claims 14 and 15 except for a specific teaching that the wear layer comprises a layer having a top and bottom surface and one or more intermediate layers on the bottom surface and an additional layer of low density polyethylene interposed between the backing and the bottom surface of the wear layer. Remmert teaches a wear layer comprising a polyethylene film. However, Remmert is not limited to any particular film. Multilayer thermoplastic films are known in the art for adhesive lamination having superior adhereability and improved processability as shown by Delisio. Delisio teaches the multilayer films comprise a thermoplastic base layer of for example polyethylene (analogous to the layer of the claim having a top and bottom surface), at least one intermediate layer of for example a polyethylene (analogous to the one or more intermediate layers of the claim on the bottom surface), and at least one additional layer of metallocene catalyzed low density polyethylene (analogous to the additionally layer of the claim) (Page 2, lines 8-10 and 16-26 and



Art Unit: 1791

Page 3, line 1 and 27-30 and Page 4, lines 7-10 and Page 5, lines 15-17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the adhesive film in Remmert as modified the multilayer adhesive film taught by Delisio having superior adhereability and improved processability.

9. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Remmert and Ausetute as applied in paragraph 5 above or Remmert as applied in paragraph 6 above, and further in view of Hanawa et al. (JP 05004248 and see also the abstract).

As noted above, the second heater taught by Remmert comprises one or more gas blowing nozzles, and the roll 3 conveys the backing and wear layer under the nozzles. The nozzles and roll are inherently in a chamber, e.g. a room of some type or even the atmosphere, heated by the nozzles which chamber meets the usual definition of an oven whereby the roll 3 conveys the backing and wear layer through the oven. In the event it is shown the chamber of Remmert is not necessarily an oven the following rejection would apply. It was extremely well known that a heating device such as one comprising one or more gas blowing nozzles is provided in a chamber, i.e. a heating oven, with the conveying device as evidenced by Hanawa (Figure and abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to house the second heat and roll conveyor (3) taught by Remmert in a well known housing to form an oven as evidenced by Hanawa to contain the heat from the one or more gas blowing nozzles.

***Response to Arguments***

10. Applicant's arguments with respect to claims 10, 12-18, and 20 have been considered but are moot in view of the new ground(s) of rejection.

Applicants argue, "Applicants' process does not use a separately applied hot-melt adhesive. Instead, in a cold application process, applicants apply the bottom surface of the wear layer to the preheated backing and then the wear layer is melted at a temperature between 120°C and 180 °C to insure that it adheres with the backing. This is followed by cooling. The rejected claims accordingly cannot be anticipated by Remmert because Remmert does not meet the all elements rule. And the claims cannot be rendered obvious by Remmert because Remmert does not teach or suggest adhering a wear layer to a backing without separately applying a hot-melt adhesive. We, therefore, respectfully request withdrawal of the rejection under 35 U.S.C. §102(b).".

The claims are not commensurate in scope with this argument. The claims do not preclude the hot-melt adhesive film from being considered the wear layer.

***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 1791

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571)272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John L. Goff/  
Primary Examiner, Art Unit 1791